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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,847	11/15/2001	Hakchu Lee	10004123	6881

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AGILENT TECHNOLOGIES, INC.
Legal Department, DL429
Intellectual Property Administration
P.O. Box 7599
Loveland, CO 80537-0599

EXAMINER

RAIZEN, DEBORAH A

ART UNIT

PAPER NUMBER

2873

DATE MAILED: 02/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/998,847

Applicant(s)

LEE, HAKCHU

Examiner

Deborah A. Raizen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 1, 2, 5, and 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 9, 12 and 15 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 6, 7, 10, 11, 13 and 14 is/are objected to.
- 8) ☒ Claim(s) 1-15 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-8, drawn to a grating-scale measurement system, classified in class 250, subclass 231.13.
 - II. Claims 9-15, drawn to a telephoto lens, classified in class 359, subclass 708+.

The inventions are distinct each from the other because of the following reasons:

2. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because claim 1, which is directed to a combination of the type AB_{br} (a grating scale measurement system in which a telephoto lens with aspheric lenses forms an image of a grating on a detector, which measures movement of an intensity distribution), does not set forth the details of the subcombination B_{sp} claimed in Group II claims (subcombination B_{sp} includes a finite conjugate subsystem of two aspheric lenses, followed by a magnifying system). Claim 1 therefore provides evidence that the combination of the measurement system as claimed does not require the particulars of the telephoto lens as claimed. The subcombination of the detailed telephoto lens has separate utility such as in an optical data storage device or in a copy machine.

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3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. Claims 9-15 link inventions I and II. The restriction requirement between the linked inventions is subject to the nonallowance of the linking claims, claims 9-15. Upon the allowance of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

5. Claims 10, 11, 13, and 14 are generic and allowable. Accordingly, the restriction requirement as to the encompassed species is hereby withdrawn and claims 3, 4, 6, and 7, directed to the species of Group I are no longer withdrawn from consideration since all of the claims to this species depend from or otherwise include each of the limitations of an allowed generic claim. However, claims 1, 2, 5, and 8, directed to the species of Group I remain

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withdrawn from consideration since they do not depend upon or otherwise include all the limitations of an allowed generic claim as required by 37 CFR 1.141.

In view of the above noted withdrawal of the restriction requirement as to the linked species, applicant(s) are advised that if any claim(s) depending from or including all the limitations of the allowable generic linking claim(s) be presented in a continuation or divisional application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

6. During a telephone conversation with Jack Wu on February 4, 2003 a provisional election was made without traverse to prosecute the invention of Group II, claims 9-15. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1, 2, 5, and 8 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

7. Claim 15 is objected to because of the following informalities: the word "form" is missing an "m". Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 9, 12, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Sillitto et al (5,151,820). In regard to claim 9, Sillitto (Fig. 1) discloses a telephoto lens comprising:

a first aspheric lens (lens element 16, col.1, lines 51-52) and a second aspheric lens (lens element 15) positioned to form a subsystem that operates at finite conjugates (in col. 1, lines 46-48 disclose that the zoom lens [which, in this context, refers to the subsystem] forms an image of the objective's image plane 13 in a second image plane 19); and

a magnifying system positioned to magnify an image of the subsystem (eyepiece lens 10).

In regard to claim 12, in the Sillitto lens, the first and second aspheric lenses are substantially identical (lens elements 15 and 16, Fig. 1, and col. 1, lines 36-37).

In regard to claim 15, in the Sillitto lens, the first and second aspheric lenses form a subsystem of unit magnification (col. 2, lines 21-22: the range of magnification of the zoom lens includes 1; in col. 1, lines 46-48, Sillitto refers to the subsystem as "the zoom lens").

Allowable Subject Matter

10. Claims 10, 11, 13, and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claims 3, 4, 6, and 7 are objected to as being dependent upon a non-elected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

12. The following is a statement of reasons for the indication of allowable subject matter: The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of claims 10, 11, 13, and 14 and claims 3, 4, 6, and 7, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper.

The prior art fails to teach a combination of all the claimed features as presented in claim 10. For example, these features include the detailed structure recited in claim 1 (especially a subsystem of aspheric lens elements that operates at finite conjugates and is followed by a magnifying system) and the limitation that the magnifying system comprises a negative lens element. Claims 11, 3, and 4 have all the limitations of claim 10 and therefore have allowable subject matter as well.

The prior art fails to teach a combination of all the claimed features as presented in claim 13. For example, these features include the detailed structure recited in claim 1 and also the limitation that an object is at a focal point of the first aspheric lens element. Claims 14, 6, and 7 have all the limitations of claim 13 and therefore have allowable subject matter as well.

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Conclusion


13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Snyder et al. (6,215,755 B1) discloses in Fig. 8 an embodiment that meets some of the limitations of claim 13, but relay lens 30 is not aspheric. Kurtz (5,754,278) discloses an illumination system in which lenslet arrays, which can be aspheric (col. 9, line 50), work at finite conjugates (col. 9, line 64) and are followed by a magnifying system. However, none of the Kurtz embodiments appear to meet the limitations of the claims that have been indicated as having allowable subject matter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Deborah A. Raizen whose telephone number is (703) 305-7940. The examiner can normally be reached on Monday-Friday, from 8 a.m. to 4:30 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached on (703) 308-4883. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

dar
February 7, 2003


Scott J. Sugarman
Primary Examiner